

NEW ABSTRACT

A variable lens includes a chamber defined by at least one side wall and has an optical axis extending longitudinally through the chamber. The chamber contains a first fluid and a second fluid contact over a meniscus extending transverse the optical axis. The perimeter of the meniscus is constrained by the side walls. The fluids are substantially immiscible, and have different indices of refraction. At least one pump is arranged to controllably alter the position of the meniscus along the optical axis by altering the relative volume of each of the fluids contained within the chamber.